

IN THE CLAIMS

Please cancel, without prejudice or disclaimer of the subject matter thereof, Claims 1-39 and enter the following new claims 40 -59:

1-39 (Canceled)

40. (New) An isolated protein selected from the group consisting of a canine B7-2 protein and a feline B7-2 protein.

41. (New) The isolated protein of Claim 40, wherein said protein lacks at least a portion of the transmembrane domains.

42. (New) The isolated protein of Claim 40, wherein said protein is encoded by a nucleic acid molecule of at least 150 nucleotides in length that hybridizes under stringent conditions with a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:10, SEQ ID NO:20, SEQ ID NO:29, SEQ ID NO:32 and SEQ ID NO:35.

43. (New) The isolated protein of Claim 42, wherein said protein is capable of binding a CTLA4 or CD28 protein or is capable of stimulating T-cells.

44. (New) The isolated protein of Claim 40, wherein said protein is encoded by a nucleic acid molecule comprising an at least 150 contiguous nucleotide region identical to a 150 contiguous nucleotide region of a nucleic acid sequence selected from the group consisting of SEQ ID NO:9, SEQ ID NO:19, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:33.

45. (New) The isolated protein of Claim 40, wherein said protein is encoded by a nucleic acid molecule comprising a nucleic acid sequence at least about 95% identical to a

nucleic acid sequence selected from the group consisting of SEQ ID NO:9, SEQ ID NO:19, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:33, wherein said protein is capable of binding a CTLA4 or CD28 protein or is capable of stimulating T-cells.

46. (New) The isolated protein of Claim 40, wherein said protein is encoded by a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:9, SEQ ID NO:19, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:33.

47. (New) An isolated protein of at least about 50 amino acids in length, wherein said protein comprises an at least 50 contiguous amino acid region identical in sequence to a 50 contiguous amino acid region from an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.

48. (New) The isolated protein of Claim 47, wherein said isolated protein comprises an amino acid sequence at least about 85% identical to an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34, wherein said isolated protein is capable of binding a CTLA4 or CD28 protein or is capable of stimulating T-cells.

49. (New) The isolated protein of Claim 47, wherein said protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.

50. (New) The isolated protein of Claim 47, wherein said protein consists an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.

51. (New) A therapeutic composition comprising the isolated protein of Claim 40, wherein said composition, when administered to an animal, regulates T-cell mediated immune responses in said animal.

52. (New) The therapeutic composition of Claim 50, wherein said composition comprises a component selected from an excipient, an adjuvant or a carrier.

53. (New) A method to regulate an immune response in an animal comprising:
(a) obtaining a composition comprising an isolated protein selected from a canine B7-2 protein or a feline B7-2 protein; and

(b) administering said composition to said animal.

54. (New) The method of Claim 53, wherein said isolated protein is selected from the group consisting of:

(a) an isolated protein encoded by a nucleic acid molecule of at least 150 nucleotides in length that hybridizes under stringent conditions with a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO:10, SEQ ID NO:20, SEQ ID NO:29, SEQ ID NO:32 and SEQ ID NO:35, wherein said encoded protein is capable of binding a CTLA4 or CD28 protein or is capable of stimulating T-cells; and,

(b) an isolated protein comprising an amino acid sequence at least about 85% identical to an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34, wherein said isolated protein is capable of binding a CTLA4 or CD28 protein or is capable of stimulating T-cells.

55. (New) The method of Claim 54, wherein said isolated protein is encoded by a nucleic acid molecule comprising a nucleotide sequence at least about 95% identical to a nucleotide sequence selected from the group consisting of SEQ ID NO:9, SEQ ID NO:19, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:33.

56. (New) The method of Claim 54, wherein said isolated protein comprises an amino acid sequence at least about 85% identical to an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.

57. (New) The method of Claim 54, wherein said isolated protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.

58. (New) The method of Claim 54, wherein said isolated protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:17, SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34.

59. (New) The method of Claim 54, wherein said animal is a canid or a felid.